

CLAIMS

1. A project management system including:

a server connected by a network to a plurality of
user terminals operated respectively by a plurality of users;
5 and

a database for storing contents contained in each
project participated in by some or all of the plurality of
users, the contents contained in those projects are stored;
wherein, the server includes:

10 (a) a communication controller for transmitting
pages to the user terminals and receiving operation messages
from the pages;

(b) a project desktop (PJ-DT) sheet generator for
reading contents data from the database in response to the
15 operation messages and generating, for each project, a page
as a project desktop for displaying or accessing all contents
belonging to the project; and

(c) an access controller for, when an access has
been made for content of the contents via the communication
20 controller, controlling communications with the user
terminals in unit of the project desktop containing the
contents.

2. The system of claim 1 wherein the project desktops
25 have member lists containing list information for members
belonging to those projects.

3. The system of claim 1 wherein the server further
includes:

30 (d) a project-oriented user attribute detector for
detecting user attributes for projects such as leaders,
members or the like of those projects set for each of the

projects for users communicating via the communication controller; and

(e) a contents-oriented access controller for controlling content of operations pertaining to the project
5 desktops based on user attributes detected and on user attribute-oriented access rights predetermined for each set of contents in the projects.

4. The system of claim 3 wherein the project desktop
10 (PJ-DT) sheet generator (b) includes:

(b-i) a member list section generator for generating, as the contents, a member list section for managing a list of members contained in the project;

(b-ii) a forum section generator for generating, as
15 the contents, a forum section for recording or displaying statements or replies of users in accordance with user attribute-oriented access rights controlled by the contents-oriented access controller (e);

(b-iii) a bookshelf section manager for generating,
20 as the contents, a bookshelf section for registering or downloading files in accordance with user attribute-oriented access rights managed by the contents-oriented access controller (e) and document files registered in that bookshelf section; and

(b-iv) an access rights registration manager for,
25 when these several contents are generated, prompting user performing those generation operations to set user attribute-oriented access rights to those contents.

30 5. The system of claim 4 wherein the server further includes:

(f) a save target selector for setting one or a plurality of the plurality of projects as a save target;

(g) an archive file upload manager for archiving contents contained in one or a plurality of project desktops set by the save target selector (e) in one archive file; and

(h) an archive file download manager for transmitting the archive file archived by the archive file upload manager to the user terminals in response to operations at those user terminals.

6. The system of claim 1 wherein the access controller (c) includes:

(c-i) a contents search function for searching one or a plurality of sets of contents containing data coinciding with data entered at the user terminals;

(c-ii) a project identify function for identifying projects to which contents searched by the contents search function belong; and

(c-iii) a PJ-DT list transfer function for transmitting a list of project desktops for projects identified by the project identify function, as search results, to the user terminals.

7. A method for supporting generation and management of data relating to projects, using a project management system, having a server connected by a network to a plurality of user terminals operated respectively by a plurality of users, and a database for storing contents belonging to each of projects participated in by some or all of the plurality of users,

wherein the method comprises the steps of:

(a) registering contents contained in projects for each of the projects;

(b) generating, when one or a plurality of the sets of contents registered have been searched or an access has

been made concerning a member belonging to a project, a list of projects including those contents or member; and

(c) generating, when a project display request has been made by the user in response to that generated project list, a page for displaying or accessing all contents contained in that project, as a project desktop sheet.

8. The method of claim 7, wherein the project desktop generating step (c) comprises the steps of:

(c-i) detecting user attributes to determine whether or not user making the display request is a member of that project;

(c-ii) specifying displays and operations permitted to that user for several contents in accordance with user attribute-oriented access rights predetermined for each set of contents of the project for which the display request was made and with attribute of user making that display request; and

(c-iii) generating contents sections according to the determined display- and operation-related rights, and generating a page wherein those contents sections are integrated as a project desktop sheet.

9. A computer program product having a recording medium for supporting generation and management of data relating to projects, using a project management system, having a server connected by a network to a plurality of user terminals operated respectively by a plurality of users; and a database for storing contents belonging to each of projects participated in by some or all of the plurality of users;

wherein the program causes the server to:

(a) register contents contained in projects for each project;

(b) generate, when one or a plurality of the sets of contents registered have been searched or an access has been made concerning a member belonging to a project, a list of projects including those contents or member; and

(c) generate, when a project display request has been made by the user based on a project list generated by the server in response to that project list generate instruction, a page for displaying or accessing all contents contained in that project, as a project desktop.

10. A project management system including a server connected by a network to a plurality of user terminals operated respectively by a plurality of users; and a database, for each project participated in by some or all of the plurality of users, wherein contents contained in those projects are stored;

wherein the server includes:

(a) means for transmitting pages to the user terminals and receiving operation messages from the pages;

(b) means for reading contents data from the database in response to the operation messages and for generating, for each project, a page as a project desktop for displaying or accessing all contents belonging to that project; and

(c) means for, when an access has been made for content of the contents via the communication controller, controlling communications with the user terminals in unit of the project desktop containing the contents.

11. A project management system including a server connected by a network to a plurality of user terminals operated respectively by a plurality of users; and a database for storing contents contained in those projects for each of

projects participated in by some or all of the plurality of users,

wherein the server includes:

a communication controller for transmitting
5 prescribed pages to the user terminals, and receiving
operation messages from the pages; and

a project desktop sheet generator for reading
contents data from the database in response to operation
messages received by the communication controller and
10 generating, for each project, a page as a project desktop for
displaying or accessing all contents belonging to the
project; and

the project desktop sheet generator comprises
functions for generating a project desktop containing, as the
15 contents, a text section for displaying text, a forum section
for recording and displaying user statements, and a bookshelf
section for managing files transferred from user terminals.

12. The system of claim 11 wherein the database
20 includes:

a project user table in which user attributes, for
projects, of leaders or members or the like of the projects,
set for each of those projects are recorded; and

a project contents table in which the user attribute-
25 oriented access rights are recorded for each set of contents
belonging to projects;

wherein the server includes:

a project-oriented user attribute determinator for using
the project user table and determining, for users in
30 communications via the communication controller, attributes
relating to projects which are objects of those
communications;

a contents-oriented access controller for controlling
display and operation content pertaining to several contents

of the project desktop, based on the attributes determined for projects of accessing users and on the user attribute-oriented access rights recorded in the project contents table;

5 wherein, the project desktop sheet generator has a function of generating a member list section for displaying or adding a list of members for each project desktop based on a list of the members belonging to projects stored in the project user table.

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13. The system of claim 11, wherein,
the database includes a project table in which are recorded the user attribute-oriented access rights for the project desktop overall; and

15 wherein, the server includes a project-oriented access setting unit for setting access rights to the project desktop based on user attributes determined by the project-oriented user attribute determinator.

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20 14. The system of claim 13 wherein,
the project contents table has contents order data wherein are recorded display order of contents belonging to that project in the project desktop;

wherein, the project desktop sheet generator includes:

25 a contents section drawing function for reading out contents such as the text based on the contents order data and sequentially drawing a contents section in accordance with access rights set by the contents-oriented access controller; and

30 a synthesis control function for effecting control to synthesize the contents sections drawn by the contents section drawing function in order according to the contents order data as a single-page project desktop.

15. The system of claim 11 wherein the database includes a document table in which are stored the locations where document files transmitted via the bookshelf section of the project desktop are stored, etc., and a document folder
5 table in which are stored virtual deployment positions in the bookshelf section for the document files managed by that document table;

wherein, the server includes a document manager for storing the document files transmitted via the bookshelf
10 section in the document table and deploying those document files in a virtual directory in the bookshelf section; and

wherein, the document manager includes a document operation control function for copying and deleting document files in accordance with user attribute-oriented access
15 rights set by the contents-oriented access controller and for submitting those document files for downloading to the user terminals.

16. The system of claim 15, wherein
20 the server includes:

a save target setting unit for setting one or a plurality of the plurality of projects as save targets;

an archive file archiving controller for archiving contents contained in the one or the plurality of project
25 desktops set by the save target setting unit, in one archive file; and

an archive file transmission controller for transmitting archive files archived by the archive file archiving controller, in response to operations at the user
30 terminals, to those user terminals; and

wherein the archive file archiving controller includes:

a project desktop page generator for generating project desktop pages wherein contents content displays or links to portions of contents are written with a prescribed

markup language, for each of the projects, in accordance with access rights set by the contents-oriented access controller;

a file storage function for storing image data used in that project desktop page and document files stored in the document table in an associated folder; and

an archive compression function for storing the project desktop page and content of the associated folder in one archive.

17. The system of claim 11, wherein the database includes:

a project contents table in which are stored lists of the projects and contents contained in those projects;

a document table in which are stored locations where document files transmitted via the bookshelf section of the project desktop are stored, etc.; and

a document folder table in which are stored virtual deployment positions in the bookshelf section for document files managed by that document table 260; and

wherein the server includes:

a search unit for implementing searches, in response to operations at the user terminals, across the various projects, of contents in those projects and of document files managed by the document table, and specifying contents titles or document titles as search results;

a first project specifying unit that references the project contents table using contents titles searched out by that search unit, and specifies projects to which those contents belong;

a second project specifying unit that references the document table and the document folder table using document titles searched out by the search unit, and specifies projects to which those documents belong; and

a list transmission controller for transmitting a list of projects specified by the first and second project specifying units to the user terminals, as search results of the search unit, in a condition of being linked to the project desktop.

18. The system of claim 17 wherein the list transmission controller includes functions for determining user attributes of users who performed the search operations for the specified projects, and for removing projects which cannot be displayed to those users from the specification results.

19. The system of claim 11, wherein the database includes a project user table, for each of the projects, wherein is stored a list of users belonging to that project; the server includes a personal desktop generator for generating an individual personal desktop for each of the users; and

the personal desktop generator includes:

a list of projects belonged to section generator for referencing the project user table, when personal desktop display requests are received from users, and generating a list of projects belonged to section that displays a list of the projects which those users belong to; and

a modification notification function that, when there has been a modification made to the contents of a project in the project list, adds and indication of the presence or absence of that modification to that project list section.

20. The system of claim 19, wherein the server includes a project list page generator for generating the project list as a project list page; and that project list page generator

includes a user name adding function that references the project user table and adds names of users belonging to projects to each of several projects respectively on that project list page.

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21. The system of claim 19 wherein the server includes a user list page generator for generating a list of the users as a user list page; and that user list page generator includes a project name adding function for referencing the project user table and adding names of projects to which users belong to each of various users respectively in that user list page.

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22. A recording medium for recording project management data thereon, which data are used by a project management system,

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wherein the system includes:

a server connected by a network to a plurality of user terminals operated respectively by a plurality of users; and

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a database, for each project participated in by some or all of the plurality of users, wherein contents belonging those projects are stored; and

wherein the project management data include:

a user table in which are stored user IDs of the plurality of users, respectively;

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a project table in which are stored project IDs for identifying the plurality of projects, a project title for each of those project IDs, and user attribute-oriented access rights for those projects;

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a project user table in which are stored the user IDs of users belonging to the projects, and order of users which constitutes the user attributes;

a contents table in which are recorded types of contents of forum section or bookshelf section or such like which are generated for each of the projects; and

a project contents table in which are recorded contents IDs of contents belonging to the projects, user attribute-oriented access rights to the several contents, and display order of several contents;

the project user table is used, when a project desktop is generated by the server, to determine user attribute of a user making a request to display that project desktop; and

the project contents table is used both to determine the contents display mode in accordance with the user attribute-oriented access rights, and to specify the display order for the several contents.

23. A method for supporting activities in project units, using a computer, comprising the steps of:

registering project originator as leader thereof; registering content, etc., of that project input by the leader as text contents;

sequentially registering members selected by the leader to form a member list;

defining contents sections for managing other contents in project desktop for each project having the text contents and the member list;

registering access rights to several contents in each contents section in accordance with attributes of leader, members, and other users;

displaying a project desktop, in response to a request to display a project desktop containing the contents sections, wherein display of and operations pertaining to various contents are limited by user attribute of user making

that display request, and adding contents input in accordance with that display to that project desktop;

generating a completion page wherein text data, statement content, and document files related to that project
5 are batched together and described with a markup language;
and

making that completion page public.

24. The method in claim 23, wherein the contents
10 sections include: document management contents for managing document files; and forum contents for recording content of statements made by leaders and members.